

1652 #17

RECEIVED

OCT 25 2002



TECH CENTER 1600/2900

1600

RAW SEQUENCE LISTING

DATE: 10/18/2002

PATENT APPLICATION: US/09/544,525A

TIME: 10:25:31

Input Set : D:\408.app.txt

Output Set: N:\CRF4\10182002\I544525A.raw

4 <110> APPLICANT: Luche, Ralf M.
 5 Wei, Bo
 8 <120> TITLE OF INVENTION: DSP-3 DUAL-SPECIFICITY PHOSPHATASE
 11 <130> FILE REFERENCE: 200125.408
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/544,525A
 14 <141> CURRENT FILING DATE: 2000-04-06
 16 <160> NUMBER OF SEQ ID NOS: 18
 18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 926
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Homo sapien
 25 <400> SEQUENCE: 1

ENTERED

```

26 cccgcgcgct cctcctccct gtaacatgcc atagtgcgcc tgcgaccaca cggccggggc      60
27 gctagcggtt gccttcagcc accatgggga atgggatgaa caagatcctg cccggcctgt      120
28 acatcggcaa cttcaaagat gccagagacg cggaacaatt gagcaagaac aaggtgacac      180
29 atattctgtc tgtccacgat agtgccaggc ctatgttgga gggagttaaa tacctgtgca      240
30 tcccagcagc ggattcacca tctcaaaacc tgacaagaca tttcaaagaa agtattaaat      300
31 tcattcacga gtgcgcgctc cgcggtgaga gctgccttgt acactgcctg gccgggggtct      360
32 ccaggagcgt gacactggtg atcgcataca tcatgaccgt cactgacttt ggctgggagg      420
33 atgccctgca caccgtgcgt gctgggagat cctgtgccaa cccaacgtg ggcttccaga      480
34 gacagctcca ggagtttgag aagcatgagg tccatcagta tcggcagtgg ctgaagggaag      540
35 aatatggaga gagccctttg caggatgcag aagaagccaa aaacattctg gccgctccag      600
36 gaattctgaa gttctggggc tttctcagaa gactgtaatg tacctgaagt ttctgaaata      660
37 ttgcaaacc cagagagttta ggctggtgct gccaaaaaga aaagcaacat agagttaaag      720
38 tatccagtag tgatttgtaa acctgttttt catattgaagc tgaatatata cgtagtcatg      780
39 tttatgttga gaactaagga tattcttttag caagagaaaa tattttcccc ttatccccac      840
40 tgctgtggag gtttctgtac ctgccttgga tgctgtgtaag gatcccggga gccttgccgc      900
41 actgccttgt ggggtggcttg gcgctc                                     926

```

43 <210> SEQ ID NO: 2
 44 <211> LENGTH: 184
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Homo sapien
 48 <400> SEQUENCE: 2

```

49 Met Gly Asn Gly Met Asn Lys Ile Leu Pro Gly Leu Tyr Ile Gly Asn
50 1           5           10          15
51 Phe Lys Asp Ala Arg Asp Ala Glu Gln Leu Ser Lys Asn Lys Val Thr
52           20           25           30
53 His Ile Leu Ser Val His Asp Ser Ala Arg Pro Met Leu Glu Gly Val
54           35           40           45
55 Lys Tyr Leu Cys Ile Pro Ala Asp Ser Pro Ser Gln Asn Leu Thr
56           50           55           60
57 Arg His Phe Lys Glu Ser Ile Lys Phe Ile His Glu Cys Arg Leu Arg

```

RAW SEQUENCE LISTING

DATE: 10/18/2002

PATENT APPLICATION: US/09/544,525A

TIME: 10:25:31

Input Set : D:\408.app.txt

Output Set: N:\CRF4\10182002\I544525A.raw

```

58 65          70          75          80
59 Gly Glu Ser Cys Leu Val His Cys Leu Ala Gly Val Ser Arg Ser Val
60          85          90          95
61 Thr Leu Val Ile Ala Tyr Ile Met Thr Val Thr Asp Phe Gly Trp Glu
62          100         105         110
63 Asp Ala Leu His Thr Val Arg Ala Gly Arg Ser Cys Ala Asn Pro Asn
64          115         120         125
65 Val Gly Phe Gln Arg Gln Leu Gln Glu Phe Glu Lys His Glu Val His
66          130         135         140
67 Gln Tyr Arg Gln Trp Leu Lys Glu Glu Tyr Gly Glu Ser Pro Leu Gln
68 145         150         155         160
69 Asp Ala Glu Glu Ala Lys Asn Ile Leu Ala Ala Pro Gly Ile Leu Lys
70          165         170         175
71 Phe Trp Ala Phe Leu Arg Arg Leu
72          180
74 <210> SEQ ID NO: 3
75 <211> LENGTH: 10
76 <212> TYPE: PRT
77 <213> ORGANISM: Homo sapien
79 <400> SEQUENCE: 3
80 Val His Cys Leu Ala Gly Val Ser Arg Ser
81 1          5          10
83 <210> SEQ ID NO: 4
84 <211> LENGTH: 23
85 <212> TYPE: PRT
86 <213> ORGANISM: Homo sapien
88 <400> SEQUENCE: 4
89 Gly Arg Val Leu Val His Cys Gln Ala Gly Ile Ser Arg Ser Gly Thr
90 1          5          10          15
91 Asn Ile Leu Ala Tyr Leu Met
92          20
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 24
96 <212> TYPE: DNA
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Primer used to obtain full length cDNA encoding
101      DSP-3
103 <400> SEQUENCE: 5
104 gacctcatgc ttctcaaact cctg
106 <210> SEQ ID NO: 6
107 <211> LENGTH: 21
108 <212> TYPE: DNA
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Primer used to obtain full length cDNA encoding
113      DSP-3
115 <400> SEQUENCE: 6
116 cgatcaccag tgtcacgctc c

```

24

21

RAW SEQUENCE LISTING

DATE: 10/18/2002

PATENT APPLICATION: US/09/544,525A

TIME: 10:25:31

Input Set : D:\408.app.txt

Output Set: N:\CRF4\10182002\I544525A.raw

```

118 <210> SEQ ID NO: 7
119 <211> LENGTH: 26
120 <212> TYPE: DNA
121 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: Primer used to obtain full length cDNA encoding
125     DSP-3
127 <400> SEQUENCE: 7
128 cagaatatgt gtcaccttgt tcttgc                                26
130 <210> SEQ ID NO: 8
131 <211> LENGTH: 26
132 <212> TYPE: DNA
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Primer used to obtain full length cDNA encoding
137     DSP-3
139 <400> SEQUENCE: 8
140 gcaagaacaa ggtgacacat attctg                                26
142 <210> SEQ ID NO: 9
143 <211> LENGTH: 28
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Primer used to obtain full length cDNA encoding
149     DSP-3
151 <400> SEQUENCE: 9
152 gggaatggga tgaacaagat cctgcccg                                28
154 <210> SEQ ID NO: 10
155 <211> LENGTH: 37
156 <212> TYPE: DNA
157 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <223> OTHER INFORMATION: Primer used to obtain full length cDNA encoding
161     DSP-3
163 <400> SEQUENCE: 10
164 cagtcttctg agaaaggccc agaacttcag aattcct                    37
166 <210> SEQ ID NO: 11
167 <211> LENGTH: 170
168 <212> TYPE: PRT
169 <213> ORGANISM: Homo sapien
171 <400> SEQUENCE: 11
172 Ser Asp Leu Asp Arg Asp Pro Asn Ser Ala Thr Asp Ser Asp Gly Ser
173 1      5      10      15
174 Pro Leu Ser Asn Ser Gln Pro Ser Phe Pro Val Glu Ile Leu Pro Phe
175      20      25      30
176 Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Glu
177      35      40      45
178 Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn
179      50      55      60

```

RAW SEQUENCE LISTING

DATE: 10/18/2002

PATENT APPLICATION: US/09/544,525A

TIME: 10:25:31

Input Set : D:\408.app.txt

Output Set: N:\CRF4\10182002\I544525A.raw

```

180 Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile Pro Ile Ser
181 65 70 75 80
182 Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser
183 85 90 95
184 Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu Val His Cys
185 100 105 110
186 Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met
187 115 120 125
188 Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile Val Lys Met
189 130 135 140
190 Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu
191 145 150 155 160
192 Asp Phe Glu Arg Thr Leu Gly Leu Ser Ser
193 165 170

```

195 <210> SEQ ID NO: 12

196 <211> LENGTH: 168

197 <212> TYPE: PRT

198 <213> ORGANISM: Homo sapien

200 <400> SEQUENCE: 12

```

201 Asp Arg Glu Leu Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val
202 1 5 10 15
203 Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr
204 20 25 30
205 Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr
206 35 40 45
207 Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe
208 50 55 60
209 Glu His Gly Gly Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His
210 65 70 75 80
211 Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile
212 85 90 95
213 Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala
214 100 105 110
215 Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys
216 115 120 125
217 Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys
218 130 135 140
219 Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe
220 145 150 155 160
221 Glu Arg Thr Leu Gly Leu Ser Ser
222 165

```

224 <210> SEQ ID NO: 13

225 <211> LENGTH: 170

226 <212> TYPE: PRT

227 <213> ORGANISM: Homo sapien

229 <400> SEQUENCE: 13

```

230 Gly Leu Cys Glu Gly Lys Pro Ala Ala Leu Leu Pro Met Ser Leu Ser
231 1 5 10 15
232 Gln Pro Cys Leu Pro Val Pro Ser Val Gly Leu Thr Arg Ile Leu Pro

```

RAW SEQUENCE LISTING

DATE: 10/18/2002

PATENT APPLICATION: US/09/544,525A

TIME: 10:25:31

Input Set : D:\408.app.txt

Output Set: N:\CRF4\10182002\I544525A.raw

```

233          20          25          30
234 His Leu Tyr Leu Gly Ser Gln Lys Asp Val Leu Asn Lys Asp Leu Met
235          35          40          45
236 Thr Gln Asn Gly Ile Ser Tyr Val Leu Asn Ala Ser Asn Ser Cys Pro
237          50          55          60
238 Lys Pro Asp Phe Ile Cys Glu Ser Arg Phe Met Arg Val Pro Ile Asn
239 65          70          75          80
240 Asp Asn Tyr Cys Glu Lys Leu Leu Pro Trp Leu Asp Lys Ser Ile Glu
241          85          90          95
242 Phe Ile Asp Lys Ala Lys Leu Ser Ser Cys Gln Val Ile Val His Cys
243          100          105          110
244 Leu Ala Gly Ile Ser Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met
245          115          120          125
246 Lys Thr Met Gly Met Ser Ser Asp Asp Ala Tyr Arg Phe Val Lys Asp
247          130          135          140
248 Arg Arg Pro Ser Ile Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu
249 145          150          155          160
250 Glu Tyr Glu Arg Thr Leu Lys Leu Leu Ala
251          165          170
253 <210> SEQ ID NO: 14
254 <211> LENGTH: 168
255 <212> TYPE: PRT
256 <213> ORGANISM: Homo sapien
258 <400> SEQUENCE: 14
259 Pro Ala Gln Ala Leu Pro Pro Ala Gly Ala Glu Asn Ser Asn Ser Asp
260 1          5          10          15
261 Pro Arg Val Pro Ile Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
262          20          25          30
263 Tyr Leu Tyr Leu Gly Ser Cys Asn His Ser Ser Asp Leu Gln Gly Leu
264          35          40          45
265 Gln Ala Cys Gly Ile Thr Ala Val Leu Asn Val Ser Ala Ser Cys Pro
266          50          55          60
267 Asn His Phe Glu Gly Leu Phe His Tyr Lys Ser Ile Pro Val Glu Asp
268 65          70          75          80
269 Asn Gln Met Val Glu Ile Ser Ala Trp Phe Gln Glu Ala Ile Ser Phe
270          85          90          95
271 Ile Asp Ser Val Lys Asn Ser Gly Gly Arg Val Leu Val His Cys Gln
272          100          105          110
273 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Ile Gln
274          115          120          125
275 Ser His Arg Val Arg Leu Asp Glu Ala Phe Asp Phe Val Lys Gln Arg
276          130          135          140
277 Arg Gly Val Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln
278 145          150          155          160
279 Leu Glu Thr Gln Val Leu Cys His
280          165
282 <210> SEQ ID NO: 15
283 <211> LENGTH: 169
284 <212> TYPE: PRT

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/544,525A

DATE: 10/18/2002

TIME: 10:25:32

Input Set : D:\408.app.txt

Output Set: N:\CRF4\10182002\I544525A.raw

L:13 M:270 C: Current Application Number differs, Wrong Format